

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims**

1. (previously presented) A stereomicroscope comprising:
  - an objective having an optical axis extending substantially vertically;
  - a zoom system downstream of the objective; and
  - a deflector element between the objective and the zoom system for deflecting observation beams emerging from the objective into corresponding magnification or observation channels of the zoom system;wherein the zoom system includes at least three substantially horizontally extending magnification or observation channels.
2. (previously presented) The stereomicroscope according to Claim 1, wherein the zoom system has four magnification or observation channels.
3. (canceled)
4. (previously presented) The stereomicroscope according to Claim 1, wherein the zoom system has four magnification or observation channels, and two of the magnification or observation channels of the zoom system extend horizontally at the same height and two of the magnification channels of the zoom system extend horizontally at a vertical spacing from one another.
5. (previously presented) The stereomicroscope according to Claim 1, further comprising another deflector element downstream of the zoom system for deflecting fewer than all of the observation beams received by the another deflector element.
6. (previously presented) The stereomicroscope according Claim 1, further comprising a deflector element which is pivotable about a horizontal axis.
7. (previously presented) The stereomicroscope according Claim 1, further comprising a deflector element which is pivotable about a vertical axis.

8. (previously presented) A stereomicroscope comprising:

an objective;

a zoom system downstream of the objective;

a deflector element between the objective and the zoom system for deflecting observation beams emerging from the objective into corresponding magnification or observation channels of the zoom system; and

deflector elements downstream of the zoom system for redirecting observation beams along a horizontal direction that is substantially opposite to a horizontal direction along which the observation beams travel through the zoom system;

wherein the zoom system includes at least three substantially horizontally extending magnification or observation channels.

9. (previously presented) The stereomicroscope according to Claim 1, further comprising at least one optical add-on component having a horizontally or vertically extending optical axis.

10. (previously presented) The stereomicroscope according to Claim 9, wherein the at least one optical add-on component includes a stereoscopic diagonal inverter element.

11. (original) The stereomicroscope according to Claim 9, wherein the at least one optical add-on component includes a laser shutter.

12. (original) The stereomicroscope according to Claim 9, wherein the at least one optical add-on component includes an optical splitter.

13. (original) The stereomicroscope according to Claim 9, wherein the at least one optical add-on component includes a data projector.

14. (original) The stereomicroscope according to Claim 9, wherein the at least one optical add-on component includes a filter.